

DETAILED ACTION

This is in reference to communication received 04 January 2010. Claims 1 – 8, 10 – 23 and 25 – 31 are pending for examination.

Response to Arguments

Applicant's arguments and concerns are for amended claims which have been responded to in response to pending claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 8, 10 – 23 and 25 – 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block US Patent 7,200,852 in view of Lewis et al. US Patent 6,385,388, DirecTV, Inc. hereinafter known as DirecTV and AFRTS COTS Worldwide Digital Video Broadcast Network hereinafter known as AFRTS

Regarding claim 1, Block teaches system and method for providing video content from a video server to a receiving device.

Block does not explicitly teach selecting, out of a group of segments of video content, a set of segments of the video content to be protected wherein the set does not include all segments of the group. However, Lewis teaches concept for selecting, out of a group of segments of video content, a set of segments of the video content to be protected wherein the set does not include all segments of the group [Lewis, Fig. 8c and disclosure associated with the Figure].

Therefore, it would have been obvious to one of ordinary skill in the art to modify Block by adopting teachings Lewis to be able to provide Parental Control to the video programming, determine where filler stream can be imbedded in the video stream, apply a known technique to a known device (method, or product) ready for improvement to yield predictable results, known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art.

Block in view of Lewis does not explicitly teach association of identifier with the processor. However, DirecTV teaches concept of association of identifier with a processor to minimize unauthorized viewing of video stream by non-subscribing viewers. Also, AFRTS teaches that video can be encrypted using plurality of methods including using a Secret Serial Number [AFRTS, page 3, col. 2, para 3]. One of ordinary

skill in the art can use Processor Number of the device as a part of the Secret Serial Number.

Therefore, at the time of invention, it would have been obvious to one of ordinary skill in the art to modify Block in view of Lewis by adopting teachings of DirecTV and AFRTS to target the video content to a single decoding device, apply a known technique to a known device (method, or product) ready for improvement to yield predictable results, known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art.

Block in view of Lewis DirecTV and AFRTS teaches concept and capability for: providing video content from a video server to a receiving device [Block, col. 2, lines 7 – 39; DirecTV, AFRTS]:

selecting by the video server, out of a group of segments of video content, a set of segments of the video content to be protected wherein the set does not include all segments of the group [Lewis, AFRTS];

protecting by the video server, the segments of the set, but not other segments of the group which are not in the set, by modifying blocks of video data contained in the protected segments [Block, Lewis, AFRTS] such that the receiving device will not properly display the protected segments on a display device unless the receiving device undoes the protection with assistance of a correct key that is not generally available and

is based at least in part on an associated identifier that includes a processor number for the receiving device; and

providing to the receiving device, by the video server, access to the group of segments of video content over a network [Block, AFRTS].

Regarding claim 2, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein selecting the set involves selecting at least some of the set for visual scrambling and protecting the set includes visually scrambling those segments selected for visual scrambling.

Regarding claim 3, as responded to earlier, Block in view of Lewis, DirecTV and AFRTS teaches concept and capability for:

providing video content, comprising:

selecting by a video server, out of a group of segments of video content, a set of segments of the video content to be protected: wherein the set does not include all segments of the group;

protecting by the video server, the segments of the set, but not other segments of the group which are not in the set, by modifying blocks of video data contained in the protected segments such that an intended receiving computer will not properly display the protected segments unless the intended receiving computer undoes the protection is with assistance of a correct key that is not generally available;

providing to the intended receiving computer, by the video server access to the group of segments of video content over a network [DirecTV, AFRTS];

wherein selecting the set involves selecting at least some of the set for visual scrambling and modifying blocks of video data includes visually scrambling blocks of video data in those segments selected for visual scrambling [Block, Lewis]; and

wherein visual scrambling involves using a key, including a remote computer number based on hardware characteristics of the intended receiving computer [DirecTV, AFRTS].

Regarding claim 4, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein the remote computer number is a processor number for the intended receiving computer.

Regarding claim 5, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein selecting the set involves designating those segments to be protected.

Regarding claim 6, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein selecting the set involves selecting at least some of the set for bit encryption and modifying blocks of video data includes bit encrypting those segments selected for bit encryption.

Regarding claim 7, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein selecting the set involves selecting at least some of the set for visual scrambling and at least some of the set for bit encryption, wherein some of the set may be selected for both visual scrambling and bit encryption, and modifying blocks of video data includes visually scrambling those segments selected for visual scrambling and bit encrypting those segments selected for bit encryption.

Regarding claim 8, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein the remote computer number is stored and matched against a remote computer number from the intended receiving computer during playback.

Regarding claim 10, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein the video content can be in an MPEG format.

Regarding claim 11, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein prior to protection, the segments include video and audio and both the video and audio are protected.

Regarding claim 12, as responded to earlier, Block in view of Lewis, DirecTV and AFRTS teaches concept and capability for receiving and processing video content by at least one receiving device having an associated identifier with a network processor number for the receiving device, comprising:

Accessing by the receiving device, over a network a group of segments of video content including a set of segments that does not include all segments of the group, and wherein the segments in the set, but not other segments of the group which are not in the set, have been protected having blocks of video data in the segments modified such that the receiving device will not properly reproduce the protected segments unless the receiving device undoes the protection with assistance of a correct key that is not generally available and is based at least in part on the processor number;

Undoing by the receiving device, the protection if the correct key is received by restoring blocks of video data in the protected segments to their original form [Lewis];
and

Displaying by the receiving device, the video content on the display device by playing the group of segments seamlessly with a media player [Lewis].

Regarding claim 13, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein at least some of the protected segments have been protected through visually scrambling.

Regarding claim 14, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein at least some of the protected segments have been protected through bit encryption.

Regarding claim 15, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein the key can include a computer number associated with the receiving device.

Regarding claim 16, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein information identifying protected segments is contained in headers [Block].

Regarding claim 17, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein information identifying protected segments is contained in at least one watermark.

Regarding claim 18, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein information identifying protected segments is contained in data transmitted separately from the segments.

Regarding claim 19, as responded to earlier, Block in view of Lewis, DirecTV and AFRTS teaches concept of a video content providing system and method, comprising:
storage to hold at least video content divided into segments and an identifier associated with a processor number for a receiving device;
a user interface; and

means for cooperating with the user interface to enable selection of a set of the segments to be protected from a group of segments, wherein the set does not include all segments of the group, the circuitry and software also configured to protect the set of selected segments, but not other segments of the group by modifying blocks of video data within the selected segments, such that access is allowed to the unprotected segments over a network but the receiving device will not properly display the protected segments after access over the network unless the receiving device undoes the protection is undone by restoring the original blocks of video data with assistance of a correct key that is not generally available, wherein the correct key is based at least in part on the processor number.

Regarding claim 20, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein said means is further for protecting the selected segments involves a key including a remote computer number.

Regarding claim 21, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein the user interface includes options to select at least some of the set of segments to be visually scrambling scrambled and the protecting of the segments selected for visual scrambling includes visual scrambling.

Regarding claim 22, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein the user interface includes options to select at least some of the set of

segments to be bit encrypted and protecting of the segments selected for bit encryption includes bit encryption.

Regarding claim 23, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein the user interface includes options to select at least some of the set of segments to be visually scrambled and at least some of the set of segments to be bit encrypted, wherein some of the set of segments may be selected for both visual scrambling and bit encryption, and

protecting of the segments selected for visual scrambling includes visually scrambling and protecting of the segments selected for bit encryption includes bit encryption.

Regarding claim 25, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein the content includes video signals and audio signals.

Regarding claim 26, as responded to earlier, Block in view of Lewis, DirecTV and AFRTS teaches concept for an article comprising a machine readable media including instructions that when executed by a video content providing system, cause the video content providing system to perform operations including:

selecting a set of segments of video content from a group of segments to be protected wherein the selected set does not include all segments of the group;

protecting the segments of the selected set but not the other segments of the group, by modifying blocks of video data such that a receiving device will not properly reproduce the protected segments unless the receiving device undoes the protection with assistance of a correct key that is not generally available, wherein the correct key is based at least in part on a processor number for the receiving device; and
providing the receiving device access to the group of segments over a network.

Regarding claim 27, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein protecting the correct key includes a computer number associated with the receiving device.

Regarding claim 28, as responded to earlier, Block in view of Lewis, DirecTV and AFRTS teaches concept for an article comprising a machine readable media including instructions that when executed by a video content receiving device, cause the receiving device to perform operations including:

accessing over a network a group of segments of content including a set of segments that does not include all segments of the group, and wherein segments in the set, but not other segments of the group which are not in the set, have been protected by modification of blocks of video data in the segments such that the receiving device will not properly reproduce the protected segments without the receiving device undoing the protection with assistance of a correct key that is not generally available, wherein

the correct key is based at least in part on a processor number for a receiving device for the content;

undoing the protection if the correct key is received by restoring original blocks of video data in the protected segments; and

playing the entire group of segments, including both the protected segments and the other segments seamlessly with a media player on the receiving device, wherein the media player plays the protected segments improperly if the correct key is not received.

Regarding claim 29, The Block in view of Lewis, DirecTV and AFRTS teaches concept wherein the key includes a remote computer number associated with the receiving device.

Regarding claim 30, Block in view of Lewis, DirecTV and AFRTS teaches concept of a method of providing content from a video server to a receiving device having an associated identifier associated with a processor number for the receiving device, comprising:

Selecting by the video server, a set of segments of content from a group of segments to be protected wherein the set does not include all segments of the group;

Protecting by the video server, the segments of the set, but not the other segments which are not in the selected set, through visual scrambling determined based at least in part on the associated identifier, wherein the visual scrambling comprises modifying coefficients of video blocks within the protected segments; and

providing access to the receiving device, by the video server, to the group of segments over a network.

Regarding claim 31, Block in view of Lewis, DirecTV and AFRTS teaches concept wherein the receiving device comprises a network information browser configured to display the provided content and to restore the coefficients of the video blocks in the protected segments using the associated identifier.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 CFR '1.111 (c) to consider the references fully when responding to this office action.

1. Garfinckle US Patent 5,400,402
2. Schuchman et al. US Patent 5,598,472

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NARESH VIG whose telephone number is (571)272-6810. The examiner can normally be reached on Mon-Thu 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 26, 2010

/Naresh Vig/
Primary Examiner, Art Unit 3629